

The Blood Utilization Program is a patient centered program built on best practices that involves many different team members. The purpose is to increase the safety of necessary blood transfusion therapy and to minimize unnecessary transfusions. This helps lower costs and improve patient outcomes.

## Blood Transfusion

More than 4 million Americans receive blood transfusions each year. A blood transfusion is a procedure where you receive donated blood through an intravenous (IV) tube. You may need a blood transfusion due to illness, surgery or injury. The blood may come from a donor, or it may be your own blood that you donated previously.

### Blood products are given for different reasons:

- Red blood cells carry oxygen.
- Platelets are needed for bleeding.
- Thawed plasma (cryoprecipitate) and/or concentrated forms of plasma help blood to clot.

### What are your benefits of receiving a blood transfusion?

- It increases the amount of oxygen in your blood, which is needed to support your body functions.
- It helps stop bleeding by replacing clotting pieces, factors or cells in your blood.
- It replaces blood that may have been lost due to bleeding, surgery or a treatment procedure.

### What are your risks of receiving blood?

The risks of not receiving blood in most cases outweigh the risks of receiving blood if a transfusion is needed during a surgical procedure or medical treatment. Some risks include but are not limited to:

- Infectious diseases. Despite careful donor selection and extensive testing of blood products for viruses, the risk of infection cannot be removed completely. This is because a small amount of time must pass before some infectious agents can be detected. The spread of an infectious disease through a blood transfusion occurs very rarely. All donated blood is screened for hepatitis B; hepatitis C; HIV; human T-lymphotropic viruses, type I and type II; West Nile virus; and syphilis.
- Other infectious diseases. There are no current FDA-approved tests for diseases such as Chagas, babesiosis, malaria and variant Creutzfeldt-Jakob disease, but donors are screened for recent diseases and travel history to reduce the risk.
- Other adverse effects. Some people may experience changes in the body's immune system after a transfusion, causing mild symptoms such as fever, chills or hives, which require little or no treatment. A small number of people may also react by developing antibodies to the blood. This is called an immune reaction. Other risks include too much fluid in the body (fluid overload), chemical imbalances and the breakdown of red blood cells.

### Alternatives to transfusion:

- There may be other options available than receiving blood from a volunteer donor. Autologous or directed blood donations, where you donate your own blood, can be arranged in some cases before a scheduled surgery if a blood transfusion is likely. In some cases, blood lost during surgery can be saved and returned to you. However, these options have their own risks and benefits.
- Some medications may be an alternative to transfusions such as iron supplements or iron infusions and drugs that increase the production of red blood cells such as Procrit® or Aranesp®.
- **If you have any questions or concerns about the risks or benefits of blood transfusions, please be sure to discuss them with your health care provider before you agree to have any blood transfusions.**

### How is a blood transfusion done?

A blood transfusion usually takes place in a hospital room, treatment room or operating room. It usually lasts one to two hours. Your health care provider will discuss the blood transfusion with you before you receive it. You will need to give permission for the blood transfusion by signing a consent form.

- Two health care providers will confirm your identity. They will also confirm that they have the correct blood product(s) for you.
- If you do not already have an IV line, one will be placed in a vein.
- The blood product comes in a plastic bag that is hung on an IV pole and attached to your IV line. The IV line may be connected to a pump, which controls the rate at which the blood is infused. You may receive more than one kind of blood product through the IV.
- Your vital signs (blood pressure, heart rate, respiratory rate and temperature) will be checked throughout the transfusion. This is to make sure that you are not having an adverse reaction to the blood product(s).
- Once the transfusion is complete, your IV line may be removed.

### Please let your nurse know if you experience any of the following symptoms:

- Fever
- Chills
- Shortness of breath
- Wheezing
- Sudden back pain
- Flushed face
- Anxiety/restlessness
- Heaviness in chest
- Generalized itching
- Heart beating fast
- Nausea or vomiting
- Bloody urine

If you experience any of the above symptoms or any other unusual symptom after you are released to go home following your transfusion, please contact your health care provider.